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## Perspective Paper

The security of the East Bay Municipal Utility District (EBMUD) water supply delivery system is essential to a population of 1.2 million in Alameda and Contra Costa Counties. EBMUD's three Mokelumne Aqueduct pipelines cross the Sacramento-San Joaquin Delta where they are vulnerable to damage from levee failure due to earthquakes or flooding. These risks could potentially disrupt water supply delivery for an extended period. In the event of an extended disruption, the limited water supply available from EBMUD's local reservoir would require severe rationing, up to 34% percent reduction in water use for a 7 to 11 month duration.

As part of its Water Supply Management planning effort, EBMUD has recently completed an Aqueduct Security Study. This Study concluded that there was a high probability of unacceptable outage due to seismic activities. Depending on an earthquake's intensity and proximity to the Delta, groundshaking could (1) result in liquefaction, a loss of strength in the water-saturated sandy soils which would weaken levee foundations and the soils surrounding the Mokelumne Aqueduct pipeline and (2) cause structural failure of the piles and supports under the elevated aqueducts. EBMUD is in the process of designing measures to strengthen the aqueduct and adjacent levees as part of its Aqueduct Upgrade Project.

Because of EBMUD's ongoing effort in developing methods to strengthen the Mokelumne Aqueduct system, the District is very interested in obtaining information pertaining to seismic stability issues for the Sacramento-San Joaquin Delta levees. EBMUD would like to obtain the Final Briefing paper developed by the Bay-Delta Oversight Council, along with perspective papers from other parties.

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